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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 26	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27	Oct 21	EVENTLINE has been reloaded
NEWS 28	Oct 24	BEILSTEIN adds new search fields
NEWS 29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS 31	Nov 18	DKILIT has been renamed APOLLIT
NEWS 32	Nov 25	More calculated properties added to REGISTRY
NEWS 33	Dec 02	TIBKAT will be removed from STN
NEWS 34	Dec 04	CSA files on STN
NEWS 35	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36	Dec 17	TOXCENTER enhanced with additional content
NEWS 37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 38	Dec 30	ISMEC no longer available
NEWS 39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 40	Jan 21	NUTRACEUT offering one free connect hour in February 2003
NEWS 41	Jan 21	PHARMAML offering one free connect hour in February 2003
NEWS 42	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC

NEWS EXPRESS	January 6 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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FILE 'HOME' ENTERED AT 12:13:36 ON 03 FEB 2003

=> fil reg
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

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STRUCTURE FILE UPDATES:    2 FEB 2003  HIGHEST RN 484639-64-7
DICTIONARY FILE UPDATES:   2 FEB 2003  HIGHEST RN 484639-64-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> e monoterpene?
E1            30      MONOTERPEN/BI
E2            25      MONOTERPENE/BI
E3             0  --> MONOTERPENE?/BI
E4             1      MONOTERPENES/BI
E5             1      MONOTERPENOID/BI
E6             7      MONOTERPENOL/BI
E7             1      MONOTERPENOLS/BI
E8             1      MONOTERPENYL/BI
E9             2      MONOTES/BI
E10            2      MONOTESONE/BI
E11           53      MONOTETRA/BI
E12            2      MONOTETRABROMO/BI
```

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=> s e1 or e2 or r4
             30 MONOTERPEN/BI
             25 MONOTERPENE/BI
            148 R4
L1          178 MONOTERPEN/BI OR MONOTERPENE/BI OR R4

=> e monoterpene
E1            2      MONOTEREPHTHALOYLHYDRAZONE/BI
E2           30      MONOTERPEN/BI
E3           25  --> MONOTERPENE/BI
E4            1      MONOTERPENES/BI
E5            1      MONOTERPENOID/BI
E6            7      MONOTERPENOL/BI
E7            1      MONOTERPENOLS/BI
E8            1      MONOTERPENYL/BI
E9            2      MONOTES/BI
E10           2      MONOTESONE/BI
E11          53      MONOTETRA/BI
E12           2      MONOTETRABROMO/BI

=> s e2 or e3 or e4
             30 MONOTERPEN/BI
             25 MONOTERPENE/BI
              1 MONOTERPENES/BI
L2           30 MONOTERPEN/BI OR MONOTERPENE/BI OR MONOTERPENES/BI

=> e sesquiterpene?
E1           52      SESQUITERPEN/BI
E2           48      SESQUITERPENE/BI
E3            0  --> SESQUITERPENE?/BI
E4            4      SESQUITERPENES/BI
E5            2      SESQUITERPENOID/BI
E6            1      SESQUITERPENOIDAL/BI
E7            4      SESQUITERPENOIDS/BI
E8            1      SESQUITERPENOL/BI
E9            1      SESQUITERPINE/BI
E10           1      SESQUITERPINEN/BI
E11           1      SESQUITERPINENOL/BI
E12           1      SESQUITETRA/BI

=> s e1 or e2 or e4
             52 SESQUITERPEN/BI
             48 SESQUITERPENE/BI
              4 SESQUITERPENES/BI
L3           52 SESQUITERPEN/BI OR SESQUITERPENE/BI OR SESQUITERPENES/BI

=> fil .search
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      39.58      39.79

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=> d his

     (FILE 'HOME' ENTERED AT 12:13:36 ON 03 FEB 2003)

     FILE 'REGISTRY' ENTERED AT 12:13:55 ON 03 FEB 2003
                E MONOTERPENE?
L1          178 S E1 OR E2 OR R4
                E MONOTERPENE
L2           30 S E2 OR E3 OR E4
                E SESQUITERPENE?
L3           52 S E1 OR E2 OR E4

     FILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 12:16:30 ON
     03 FEB 2003

=> s l2 or l3
L4         1412 L2 OR L3

=> s l4 and (tumor? or tumour?)
L5           20 L4 AND (TUMOR? OR TUMOUR?)

=> dup rem l5
PROCESSING COMPLETED FOR L5
L6           18 DUP REM L5 (2 DUPLICATES REMOVED)

=> d ibib ab 1-
YOU HAVE REQUESTED DATA FROM 18 ANSWERS - CONTINUE? Y/(N):y
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L6 ANSWER 1 OF 18 USPATFULL
ACCESSION NUMBER: 2002:67348 USPATFULL
TITLE: Sesquiterpene synthases from grand fir (abies grandis), and methods of use
INVENTOR(S): Croteau, Rodney Bruce, Pullman, WA, UNITED STATES
Bohlmann, Jorg, Jena, GERMANY, FEDERAL REPUBLIC OF
Crock, John E., Moscow, ID, UNITED STATES
Steele, Christopher L., Admore, OK, UNITED STATES
PATENT ASSIGNEE(S): Washington State University Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002038001	A1	20020328
	US 6451576	B2	20020917
APPLICATION INFO.:	US 2001-865171	A1	20010524 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-234393, filed on 20 Jan 1999, GRANTED, Pat. No. US 6265639

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-72204P	19980122 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC, 1420 FIFTH AVENUE, SUITE 2800, SEATTLE, WA, 98101-2347
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 5307
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB cDNAs encoding E-.alpha.-bisabolelene synthase, .delta.-selinene synthase and .gamma.-humulene synthase from Grand Fir (Abies grandis) have been isolated and sequenced, and the corresponding amino acid sequences have been determined. Accordingly, isolated DNA sequences (SEQ ID No:12; SEQ ID No:19 and SEQ ID No:23) are provided which code for the expression of E-.alpha.-bisabolene synthase (SEQ ID No:13), .delta.-selinene synthase (SEQ ID No:20) and .gamma.-humulene synthase (SEQ ID No:24), respectively, from Grand Fir (Abies grandis). In other aspects, replicable recombinant cloning vehicles are provided which code for E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase, or for a base sequence sufficiently complementary to at least a portion of E-.alpha.-bisabolene synthase, .delta.-selinene synthase or .gamma.-humulene synthase DNA or RNA to enable hybridization therewith. In yet other aspects, modified host cells are provided that have been transformed, transfected, infected and/or injected with a recombinant cloning vehicle and/or DNA sequence encoding E-.alpha.-bisabolene synthase, .delta.-selinene synthase or .gamma.-humulene synthase. Thus, systems and methods are provided for the recombinant expression of the aforementioned recombinant sesquiterpene synthases that may be used to facilitate their production, isolation and purification in significant amounts. Recombinant E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase may be used to obtain expression or enhanced expression of E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase in plants in order to enhance the production of sesquiterpenoids, or may be otherwise employed for the regulation or expression of E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase, or the production of their products.

L6 ANSWER 2 OF 18 USPATFULL
ACCESSION NUMBER: 2002:194743 USPATFULL
TITLE: Monoterpene synthases from grand fir (Abies grandis)
INVENTOR(S): Steele, C. L., Ardmore, OK, United States
Bohlmann, Joerg, Jena, GERMANY, FEDERAL REPUBLIC OF
Croteau, Rodney B., Pullman, WA, United States
PATENT ASSIGNEE(S): Washington State University Research Foundation, Pullman, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6429014	B1	20020806
APPLICATION INFO.:	US 1999-360545		19990726 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1998-US14528, filed on 10 Jul 1998

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-52249P	19970711 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Bui, Phuong T.
LEGAL REPRESENTATIVE: Christensen O'Connor Johnson Kindness PLLC
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 25 Drawing Figure(s); 25 Drawing Page(s)
LINE COUNT: 5595
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB cDNAs encoding gymnosperm monoterpene synthases have been isolated and sequenced, and the corresponding amino acid sequences have been determined. Modified host cells are provided that have been transformed, transfected, infected and/or injected with a recombinant cloning vehicle and/or DNA sequence encoding a monoterpene synthase of the invention. Thus, systems and methods are provided for the recombinant expression of recombinant monoterpene synthases that may be used to facilitate their production, isolation and purification in significant amounts.

L6 ANSWER 3 OF 18 USPATFULL
ACCESSION NUMBER: 2001:178834 USPATFULL
TITLE: Geranyl diphosphate synthase large subunit, and methods of use
INVENTOR(S): Croteau, Rodney B., Pullman, WA, United States
Burke, Charles C., Moscow, ID, United States
Wildung, Mark R., Colfax, WA, United States
PATENT ASSIGNEE(S): Washington State University Research Foundation, Pullma, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6303330	B1	20011016
APPLICATION INFO.:	US 1999-420211		19991018 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1998-US21772, filed on 15 Oct 1998 Continuation-in-part of Ser. No. US 1997-951924, filed on 16 Oct 1997, now patented, Pat. No. US 5876964

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Christensen O'Connor Johnson Kindness PLLC
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 2145
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A cDNA encoding geranyl diphosphate synthase large subunit from peppermint has been isolated and sequenced, and the corresponding amino acid sequence has been determined. Replicable recombinant cloning vehicles are provided which code for geranyl diphosphate synthase large subunit). In another aspect, modified host cells are provided that have been transformed, transfected, infected and/or injected with a recombinant cloning vehicle and/or DNA sequence encoding geranyl diphosphate synthase large subunit. In yet another aspect, the present invention provides isolated, recombinant geranyl diphosphate synthase protein comprising an isolated, recombinant geranyl diphosphate synthase large subunit protein and an isolated, recombinant geranyl diphosphate synthase small subunit protein. Thus, systems and methods are provided for the recombinant expression of geranyl diphosphate synthase.

L6 ANSWER 4 OF 18 USPATFULL
ACCESSION NUMBER: 2001:117244 USPATFULL
TITLE: Gymnosperm nucleic acid molecules encoding sesquiterpene synthases and methods of use
INVENTOR(S): Croteau, Rodney Bruce, Pullman, WA, United States
Bohlmann, Jorg, Jena, Germany, Federal Republic of
Jetter, Reinhard, Wurzburg, Germany, Federal Republic of
Crock, John E., Moscow, ID, United States
Steele, Christopher L., Admore, OK, United States
PATENT ASSIGNEE(S): Washington State University Foundation, Pullman, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6265639	B1	20010724
APPLICATION INFO.:	US 1999-234393		19990120 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-72204P	19980122 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nelson, Amy J.
LEGAL REPRESENTATIVE: Christensen O'Connor Johnson Kindness PLLC
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2543
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB cDNAs encoding E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase from Grand Fir (Abies grandis) have been isolated and sequenced, and the corresponding amino acid sequences have been determined. Accordingly, isolated DNA sequences (SEQ ID No:12 and SEQ ID No:19 and SEQ ID No:23) are provided which code for the expression of E-.alpha.-bisabolene synthase (SEQ ID No:13), .delta.-selinene synthase (SEQ ID No:20) and .gamma.-humulene synthase (SEQ ID No: 24), respectively, from Grand Fir (Abies grandis). In other aspects, replicable recombinant cloning vehicles are provided which code for E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase, or for a base sequence sufficiently complementary to at least a portion of E-.alpha.-bisabolene synthase, .delta.-selinene synthase or .gamma.-humulene synthase DNA or RNA to enable hybridization therewith. In yet other aspects, modified host cells are provided that have been transformed, transfected, infected and/or injected with a recombinant cloning vehicle and/or DNA sequence encoding E-.alpha.-bisabolene synthase, .delta.-selinene synthase or .gamma.-humulene synthase. Thus, systems and methods are provided for the recombinant expression of the aforementioned recombinant sesquiterpene synthases that may be used to facilitate their production, isolation and purification in significant amounts. Recombinant E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase may be used to obtain expression or enhanced expression of E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase in plants, or may be otherwise employed for the regulation or expression of E-.alpha.-bisabolene synthase, .delta.-selinene synthase and .gamma.-humulene synthase.

L6 ANSWER 5 OF 18 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2001:567520 BIOSIS
DOCUMENT NUMBER: PREV200100567520
TITLE: The GDNF/RET signaling pathway and human diseases.
AUTHOR(S): Takahashi, Masahide (1)
CORPORATE SOURCE: (1) Department of Pathology, Graduate School of Medicine, Nagoya University, 65 Tsurumai-cho, Showa-ku, Nagoya, 466-8550: mtakaha@med.nagoya-u.ac.jp Japan
SOURCE: Cytokine & Growth Factor Reviews, (December, 2001) Vol. 12,
No. 4, pp. 361-373. print.
ISSN: 1359-6101.
DOCUMENT TYPE: General Review
LANGUAGE: English
SUMMARY LANGUAGE: English

L6 ANSWER 6 OF 18 USPATFULL
ACCESSION NUMBER: 2000:70973 USPATFULL
TITLE: Chimeric isoprenoid synthases and uses thereof
INVENTOR(S): Chappell, Joseph, Lexington, KY, United States
Back, Kyoungwhan, Lexington, KY, United States
PATENT ASSIGNEE(S): Board of Trustees of the University of Kentucky, Lexington, KY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6072045		20000606
APPLICATION INFO.:	US 1998-134699		19980814 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-631341, filed on 12 Apr 1996, now patented, Pat. No. US 5824774		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Huff, Sheela
LEGAL REPRESENTATIVE: Clark & Elbing, LLP
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1337
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a chimeric isoprenoid synthase polypeptide including a first domain from a first isoprenoid synthase joined to a second domain from a second, heterologous isoprenoid synthase, whereby the chimeric isoprenoid synthase is capable of catalyzing the production of isoprenoid reaction products that are not produced in the absence of the second domain of the second, heterologous isoprenoid synthase. Also disclosed is a chimeric isoprenoid synthase polypeptide including an asymmetrically positioned homologous domain, whereby the chimeric isoprenoid synthase is capable of catalyzing the production of isoprenoid reaction products that are not produced when the domain is positioned at its naturally-occurring site in the isoprenoid synthase polypeptide.

L6 ANSWER 7 OF 18 USPATFULL
ACCESSION NUMBER: 1999:43445 USPATFULL
TITLE: Monoterpene synthases from common sage (Salvia officinalis)
INVENTOR(S): Croteau, Rodney Bruce, Pullman, WA, United States
Wise, Mitchell Lynn, Pullman, WA, United States
Katahira, Eva Joy, Pullman, WA, United States
Savage, Thomas Jonathan, Christchurch 5, New Zealand
PATENT ASSIGNEE(S): Washington State University Research Foundation, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5891697		19990406
APPLICATION INFO.:	US 1997-937540		19970925 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Saidha, Tekchand
LEGAL REPRESENTATIVE: Christensen O'Connor Johnson & Kindness PLLC
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 2204
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB cDNAs encoding (+)-bornyl diphosphate synthase, 1,8-cineole synthase and (+)-sabinene synthase from common sage (Salvia officinalis) have been isolated and sequenced, and the corresponding amino acid sequences has been determined. Accordingly, isolated DNA sequences (SEQ ID No:1; SEQ ID No:3 and SEQ ID No:5) are provided which code for the expression of (+)-bornyl diphosphate synthase (SEQ ID No:2), 1,8-cineole synthase (SEQ ID No:4) and (+)-sabinene synthase SEQ ID No:6), respectively, from sage (Salvia officinalis). In other aspects, replicable recombinant cloning vehicles are provided which code for (+)-bornyl diphosphate synthase, 1,8-cineole synthase or (+)-sabinene synthase, or for a base sequence sufficiently complementary to at least a portion of (+)-bornyl diphosphate synthase, 1,8-cineole synthase or (+)-sabinene synthase DNA or RNA to enable hybridization therewith. In yet other aspects, modified host cells are provided that have been transformed, transfected, infected and/or injected with a recombinant cloning vehicle and/or DNA sequence encoding (+)-bornyl diphosphate synthase, 1,8-cineole synthase or (+)-sabinene synthase. Thus, systems and methods are provided for the recombinant expression of the aforementioned recombinant monoterpene synthases that may be used to facilitate their production, isolation and purification in significant amounts. Recombinant (+)-bornyl diphosphate synthase, 1,8-cineole synthase and (+)-sabinene synthase may be used to obtain expression or enhanced expression of (+)-bornyl diphosphate synthase, 1,8-cineole synthase and (+)-sabinene synthase in plants in order to enhance the production of monoterpenoids, or may be otherwise employed for the regulation or expression of (+)-bornyl diphosphate

L6 ANSWER 7 OF 18 USPATFULL (Continued)
synthase, 1,8-cineole synthase and (+)-sabinene synthase, or the production of their products.

L6 ANSWER 8 OF 18 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:61921 BIOSIS
DOCUMENT NUMBER: PREV200000061921
TITLE: Molecular mechanisms of RET activation in human neoplasia.
AUTHOR(S): Santoro, M. (1); Carlomagno, F.; Melillo, R. M.; Billaud, M.; Vecchio, G.; Fusco, A.
CORPORATE SOURCE: (1) Centro di Endocrinologia ed Oncologia Sperimentale del C.N.R, Universita degli Studi di Napoli, Via S. Pansini 5, 80131, Napoli Italy
SOURCE: Journal of Endocrinological Investigation, (Nov., 1999) Vol. 22, No. 10, pp. 811-819. ISSN: 0391-4097.
DOCUMENT TYPE: General Review
LANGUAGE: English

L6 ANSWER 9 OF 18 USPATFULL
ACCESSION NUMBER: 1998:128359 USPATFULL
TITLE: Chimeric isoprenoid synthases and uses thereof
INVENTOR(S): Chappell, Joseph, Lexington, KY, United States
Back, Kyoungwhan, Lexington, KY, United States
PATENT ASSIGNEE(S): Board of Trustees of the University of Kentucky, Lexington, KY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5824774		19981020
APPLICATION INFO.:	US 1996-631341		19960412 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Huff, Sheela
LEGAL REPRESENTATIVE: Clark & Elbing LLP
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1388
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a chimeric isoprenoid synthase polypeptide including a first domain from a first isoprenoid synthase joined to a second domain from a second, heterologous isoprenoid synthase, whereby the chimeric isoprenoid synthase is capable of catalyzing the production of isoprenoid reaction products that are not produced in the absence of the second domain of the second, heterologous isoprenoid synthase. Also disclosed is a chimeric isoprenoid synthase polypeptide including an assymetrically positioned homologous domain, whereby the chimeric isoprenoid synthase is capable of catalyzing the production of isoprenoid reaction products that are not produced when the domain is positioned at its naturally-occurring site in the isoprenoid synthase polypeptide.

L6 ANSWER 10 OF 18 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:232423 BIOSIS
DOCUMENT NUMBER: PREV199698796552
TITLE: A cDNA clone for taxadiene synthase, the diterpene cyclase that catalyzes the committed step of taxol biosynthesis.
AUTHOR(S): Wildung, Mark R.; Croteau, Rodney (1)
CORPORATE SOURCE: (1) Inst. Biol. Chem., Washington State University, Pullman, WA 99164-6340 USA
SOURCE: Journal of Biological Chemistry, (1996) Vol. 271, No. 16, pp. 9201-9204.
ISSN: 0021-9258.
DOCUMENT TYPE: Article
LANGUAGE: English
AB The committed step of taxol (paclitaxel) biosynthesis is catalyzed by taxa-4(5),11(12)-diene synthase, a diterpene cyclase responsible for transforming the ubiquitous isoprenoid intermediate geranylgeranyl diphosphate to the parent olefin with a taxane skeleton. T obtain the corresponding cDNA clone, a set of degenerate primers was constructed based on consensus sequences of related monoterpene, sesquiterpene, an diterpene cyclases. Two of these primers amplified 83-base pair fragment that was cyclase-like in sequence and that was employed as a hybridization probe to screen a cDNA library constructed from poly(A)+ RNA extracted from Pacific yew (Taxus brevifolia) stems. Twelve independent clones with insert size in excess of 2 kilobase pairs were isolated and partially sequenced. One of these cDNA isolates was functionally expressed in Escherichia coli, yielding a protein that was catalytically active in converting geranylgeranyl diphosphate to a diterpene olefin that was confirmed to be taxa4(5),11(12)-diene by combined capillary gas chromatography-mass spectrometry. The sequence specifies an open reading frame of 2586 nucleotides, and the complete deduced polypeptide, including a long presumptive plastidial targeting peptide, contains 862 amino acid residues and has a molecular weight of 98,303, compared with about 79,000 previously determined for the mature native enzyme. Sequence comparisons with monoterpene, sesquiterpene, and diterpene cyclases of plant origin indicate a significant degree of similarity between these enzymes; the taxadiene synthase most closely resembles (46% identity, 67% similarity) abietadiene synthase, a diterpene cyclase from grand fir.

L6 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:393156 CAPLUS
DOCUMENT NUMBER: 125:52091
TITLE: Identifying functional domains within terpene cyclases using a domain-swapping strategy
AUTHOR(S): Back, Kyoungwhan; Chappell, Joseph
CORPORATE SOURCE: Plant Physiology/Biochemistry/Molecular Biology Program, University Kentucky, Lexington, KY, 40546-0091, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1996), 93(13), 6841-6845
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cyclic terpenes and terpenoids are found throughout nature. They comprise an esp. important class of compds. from plants that mediate plant-environment interactions, and they serve as pharmaceutical agents with antimicrobial and anti-tumor activities. Mol. comparisons of several terpene cyclases, the key enzymes responsible for the multistep cyclization of C10, C15, and C20 allylic diphosphate substrates, have revealed a striking level of sequence similarity and conservation of exon position and size within the genes. Functional domains responsible for a terminal enzymic step were identified by swapping regions approximating exons between a Nicotiana tabacum 5-epiaristolochene synthase (TEAS) gene and a Hyoscyamus muticus vetispiradiene synthase (HVS) gene and by characterization of the resulting chimeric enzymes expressed in bacteria. While exon 4 of the TEAS gene conferred specificity for the predominant reaction products of the tobacco enzyme, exon 6 of the HVS gene conferred specificity for the predominant reaction product(s) of the Hyoscyamus enzyme. Combining these two functional domains of the TEAS and HVS genes resulted in a novel enzyme capable of synthesizing reaction products reflective of both parent enzymes. The relative ratio of the TEAS and HVS reaction products was also influenced by the source of exon 5 present in the new chimeric enzymes. The assocn. of catalytic activities with conserved but sep. exonic domains suggests a general means for generating addnl. novel terpene cyclases.

L6 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
ACCESSION NUMBER: 1991:600896 CAPLUS
DOCUMENT NUMBER: 115:200896
TITLE: Carcinogenic activity of the pesticide olgin in a chronic experiment in rats
AUTHOR(S): Petrovskaya, O. G.; Baglei, E. A.; Reshavskaya, E. V.
CORPORATE SOURCE: All-Union Sci. Res. Inst. Hyg. Toxicol. Pestic., Polym. Plast., Kiev, 252127, USSR
SOURCE: Eksperimental'naya Onkologiya (1991), 13(4), 18-20
CODEN: EKSODD; ISSN: 0204-3564
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Olgin administered orally to rats at doses of 0.30 and 30 mg/kg body wt. daily for 24 mo. promoted an increase in the tumor rate, the multiplicity index, and the relative risk and a decrease in the latent period. Tumor formation was high in the mammary gland, endocrine organs, and hemogenic tissues. No significant sex differences were found. The results demonstrated that olgin is carcinogenic.

L6 ANSWER 13 OF 18 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1989:319805 BIOSIS
DOCUMENT NUMBER: BR37:22577
TITLE: ELABORATION OF FUSED GEM-DIMETHYLCYCLOPROPANE SYSTEMS VIA CYCLOPROPENE CYCLOADDITION A STEREOCOMPLEMENTARY APPROACH.
AUTHOR(S): RIGBY J H; KIERKUS P C
CORPORATE SOURCE: DEP. CHEM., WAYNE STATE UNIV., DETROIT, MICH. 48202.
SOURCE: J. Am. Chem. Soc., (1989) 111 (11), 4125-4126.
CODEN: JACSAT. ISSN: 0002-7863.
FILE SEGMENT: BR; OLD
LANGUAGE: English

L6 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:434312 CAPLUS
DOCUMENT NUMBER: 101:34312
TITLE: Toxicological features of T 2 toxin and related trichothecenes
AUTHOR(S): Ueno, Yoshio
CORPORATE SOURCE: Fac. Pharm. Sci., Tokyo Univ. Sci., Tokyo, 162, Japan
SOURCE: Fundamental and Applied Toxicology (1984), 4(2, Pt. 2), 124-32
CODEN: FAATDF; ISSN: 0272-0590
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Toxicol. characteristics of toxin T 2 (I) [21259-20-1] and related trichothecenes, mycotoxins produced by Fusarium, Trichoderma, Verrucaria, and others, were investigated in regard to LD50 values, dermal toxicity, hematol. changes, and **tumorigenicity**. The LD50 values (mg/kg) of I in adult male mice were orally 10.5, i.p. 5.2, s.c. 2.1, and i.v. 4.2, and those of nivalenol [23282-20-4] were i.p. 4.1 and i.v. 6.3. The lethal toxicity of I and nivalenol was .apprx.10 times higher than deoxynivalenol [51481-10-8]. Newborn and immature animals were much more susceptible than adults. Inhalation expts. revealed that 33 ppb I for 160-min and 140 ppb for 30-min exposure were enough to cause death in mice within several days. The dermal toxicity of I and macrocyclic trichothecenes (verrucarin A [3148-09-2] and roridin A [14729-29-4]) was significantly higher than the other trichothecenes, and the induction of edema and other dermal toxicities is caused by direct attack of the trichothecenes on the capillary vessels. No **tumorigenicity** of fusarenon X [23255-69-8] to dermal tissues was shown in mice.

L6 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:162967 CAPLUS
DOCUMENT NUMBER: 96:162967
TITLE: Structural modifications of anguidin and antitumor activities of its analogs
AUTHOR(S): Kaneko, T.; Schmitz, H.; Essery, J. M.; Rose, W.; Howell, H. G.; O'Herron, F. A.; Nachfolger, S.; Huftalen, J.; Bradner, W. T.; et al.
CORPORATE SOURCE: Bristol Lab., Div. Bristol-Myers Co., Syracuse, NY, 13201, USA
SOURCE: Journal of Medicinal Chemistry (1982), 25(5), 579-89
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Approx. 60 derivs. of anguidin e.g., I (R = H, ClCH2CO2 tetrahydropyranyl; R1 = Ac, H, R2 = H, acyl), were prepd. for evaluation of antitumor activities. Positions 3,4,8,9,10, and 15 were modified, and the resultant derivs. were screened against P-388 leukemia. Introduction of the C3-oxo and C3,C8-oxo groups markedly improved the antileukemic activity, whereas epoxidn. of the C9-C10 double bond or oxidn. of the C15 position diminished its activity. Selected derivs. were further tested in the L1210, B16, Lewis lung, Colon 36, and Colon 38 **tumor** lines. Among these compds. 4.beta.,15-diacetoxyscirpene-3,8-dione and 4.beta.-(chloroacetoxy)-15-acetoxyscirpene-3,8-dione were most active in various **tumors**.

L6 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:70705 CAPLUS
DOCUMENT NUMBER: 92:70705
TITLE: Detection of Fusarium toxic strains
AUTHOR(S): Payen, J.; Lafont, P.; Parache, R. M.; Boller, F.
CORPORATE SOURCE: Lab. Mycol. Appl., ENSAIA, Nancy, F-54000, Fr.
SOURCE: Collection de Medecine Legale et de Toxicologie Medicale (1978), Volume Date 1977, 107(Mycotoxines), 111-17
CODEN: CMLMDW; ISSN: 0398-9119
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Human and mouse **tumor** cultures were incubated in terasaki plates with toxin T 2 (I) [21259-20-1], diacetoxyscirpenol (II) [2270-40-8], neosolaniol (III) [36519-25-2], and butenolide [497-23-4] with a view to detg. the toxicity threshold (crit. titer). At the crit. level the toxins gave an asynchronous cell fraction, consisting of rounded granular cells which detached themselves and a fraction offuse-shaped cells altered in situ. Sensitivity thresholds were for I 10, II 32, III 800, and butenolide 1800 .mu.g/g, resp., in the human cancer test cultures. Resp. values for the mouse cancer cultures were 64, 320, 800, and 20,000 .mu.g/g. For test with germinating Lepidium sativum seed, the resp. values were 800, 10,000, 50,000, and 250,000 .mu.g/g. The toxins inhibited the radicle growth with great regularity. The rapidity of the L. sativum tests permits its use in routine checking of foods. The 3 tests gave satisfactory results with fractionated exts. from Fusarium poae, both with fractions which contained I, II, and III, and therefore were toxic for chicken embryos, and in tests with fractions free of I-III which were not toxic to chicken embryos but affected the cancer cell cultures and L. sativum germination.

L6 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2
ACCESSION NUMBER: 1973:543406 CAPLUS
DOCUMENT NUMBER: 79:143406
TITLE: Comparative toxicology of trichothec mycotoxins. Inhibition of protein synthesis in animal cells
AUTHOR(S): Ueno, Yoshio; Nakajima, Michiko; Sakai, Kosei; Ishii, Kenji; Sato, Norio; Shimada, Noriko
CORPORATE SOURCE: Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, Japan
SOURCE: Journal of Biochemistry (Tokyo, Japan) (1973), 74(2), 285-96
CODEN: JOBIAO; ISSN: 0021-924X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Among 14 kinds of 12,13-epoxy-trichothec mycotoxions and related antibiotics tested, 12 inhibited the uptake of 14C-labeled leucine by whole cell rabbit reticulocytes. The mycotoxins inhibited the uptake of leucine and thymidine without affecting uracil uptake in Ehrlich ascite **tumor** cells. Rabbit reticulocyte polyribosomes were degraded by low trichothecene concns. In concns. lower than the inhibitory concns. of puromycin and cycloheximide, the trichothecenes inhibited poly-U-dependent synthesis of polyphenylalanine in cell-free reticulocyte and rat liver systems. Fusarenon-X [23255-69-8] did not inhibit protein synthesis in whole-cell or cell-free Escherichia coli systems, but slightly inhibited the uptake of it amino acids in yeast (Geotrichum candidum). Biochem. features of trichothec mycotoxin action are discussed in relation to their chem. and toxicol. characteristics.

L6 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:94528 CAPLUS
DOCUMENT NUMBER: 76:94528
TITLE: Cytotoxicity of sesquiterpene lactones
AUTHOR(S): Lee, Kuo-Hsiung; Huang, Eng-Shang; Piantadosi, Claude;
Pagano, Joseph S.; Geissman, T. A.
CORPORATE SOURCE: Dep. Med. Chem., Univ. North Carolina, Chapel Hill, NC, USA
SOURCE: Cancer Research (1971), 31(11), 1649-54
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The toxicity of sesquiterpene lactones to 3 human cell lines is mainly due to an .alpha.-methylene-.gamma.-lactone moiety in the sesquiterpene molecules such as canin (I) [24959-84-0]. The cytotoxicity tests were performed in a microtest plate in which different concns. of 18 sesquiterpene lactones were simultaneously tested against 3 cell lines: human laryngeal carcinoma, normal human fibroblasts, and human cells transformed with simian virus 40. Hydrogenation of the conjugated .alpha.-methylene-.gamma.-lactone systems, as in .alpha.-santonin [481-06-1], vulgarin [3162-56-9], and deacetoxymatricarin [10180-88-8] led to essentially inactive compds., whereas the remaining sesquiterpene lactones contg. the O=C-C=CH2 system inhibited the growth of these cells.